

Attorney Docket No. P66034US0
Application No. 09/674,277

Amendments to the claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-19 (cancelled).

20 (currently amended): An isolated nucleic acid consisting of a nucleic acid sequence wherein the nucleic acid sequence is SEQ ID NO. 2, its complementary sequence, a fragment of SEQ ID NO: 2 or a sequence derived from SEQ ID NO: 2 by deletion and/or substitution of one or more bases, said derived sequence hybridizing with sequence SEQ ID NO: 2 or its complementary sequence by contacting with a hybridization solution of 5-fold concentrated sodium saline phosphate EDTA, 0.5% Tween 20, and 0.01% merthiolate followed by washing with a solution containing 10 mM Tris-HCl, 300 mM NaCl and 0.1% Tween 20, pH 7.4, wherein each of said fragment and said derived sequence comprises a nucleotide chain of at least 30 consecutive nucleotides of SEQ ID NO: 2, excluding a nucleotide chain of at least 30 nucleotides within or overlapping the region defined by nucleotides ~~237-570~~ 237-570 of SEQ ID NO: 2, and detects enterohaemorrhagic *Escherichia coli* (EHECs).

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21 (previously presented): An isolated nucleic acid consisting of a nucleotide sequence wherein the nucleotide sequence is SEQ ID NO: 1, a fragment thereof, or a sequence derived from SEQ ID NO: 1 by deletion and/or substitution of one or more bases, said derived sequence hybridizing with sequence SEQ ID NO: 1 or its complementary sequence by contacting with a hybridization solution of 5-fold concentrated sodium saline phosphate EDTA, 0.5% Tween 20, and 0.01% merthiolate and washing with a solution containing 10 mM Tris-HCl, 300 mM NaCl and 0.1% Tween 20, pH 7.4, said fragment and derived sequence, each, containing a nucleotide chain of at least 14 consecutive nucleotides of SEQ ID NO: 1 and including nucleotides 400 to 407 of SEQ ID NO: 1 resulting from stable combination of at least a portion of insertion sequence *IS91* and at least a portion of gene sequence *kaiP*, wherein each of said fragment and said derived sequence detects an *Escherichia coli* as being enterohaemorrhagic *Escherichia coli* (EHEC) of serotype O157:H7.

Claims 22 and 23 (cancelled).

24 (previously presented): The isolated nucleic acid according to claim 21 wherein the nucleotide sequence is selected from the group consisting of:

SEQ ID NO: 10 : 5'-AAGGGGTTCCAAGCCGCAACTGACGA-3'

SEQ ID NO: 11 : 5'-TAAGGGGTTCCAAGCCGCAACTGACG-3' 10

SEQ ID NO: 12 : 5'-CTCAACGGCATCGTCAGTTGCGGCTTGGAAC-3'

SEQ ID NO: 13 : 5'-AGCACTCAACGGCATCGTCAGTTGCGGCTTG-3'

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SEQ ID NO: 18 : 5'-GGCATCGTCAGTTG-3'

SEQ ID NO: 19 : 5'-CGGCATCGTCAGTTGC-3' and

SEQ ID NO: 20 : 5'-ACGGCATCGTCAGTTGCG-3'.

25 (previously presented): An isolated nucleic acid consisting of a nucleic acid sequence selected from the group consisting of:

SEQ ID NO: 21 : 5'-CCACCTGAACGATAAGCGGAAC-3'

SEQ ID NO: 22 : 5'-CACCTTCCTTCCATCCTCAGAC-3'

SEQ ID NO: 23 : 5'-ATCCCAGCGCGCTCCAGCTG-3'

SEQ ID NO: 24 : 5'-ACCCATGATGGCGCATCTGATG-3'

SEQ ID NO: 25 : 5'-ACGTTCTGGTCTTACGGGTGATGTAGGTTTT-3'

SEQ ID NO: 26 : 5'-TAGTGAAGCGGTGACAGCATATCAGACGGCT-3' and

SEQ ID NO: 27 : 5'-GTGAGATAGGCACAACAATGA-3'.

Claim 26 (cancelled).

27 (previously presented): Plasmid pDF3 deposited at Collection Nationale de Cultures de Microorganismes under number I-1999, on 26 March 1998.

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28 (previously presented): Plasmid pDF4 deposited at Collection Nationale de Cultures de Microorganismes under number I-2000, on 26 March 1998.

29 (previously presented): A host cell comprising the plasmid according to claim 27.

30 (previously presented): A host cell comprising the plasmid according to claim 28.

Claims 31-61 (cancelled).